**Appendix.** The literature search strategy for the systemic literature review of postoperative medication use in congenital heart disease is outlined below. All searches were performed June 2020.

|  |  |
| --- | --- |
| PubMed | Results |
| 1 | ("Pediatrics"[Mesh] OR pediatric[tiab] OR pediatrics[tiab] OR paediatric[tiab] OR paediatrics[tiab] OR juvenile[tiab] OR juveniles[tiab] OR "Infant"[Mesh] OR infant[tiab] OR infants[tiab] OR infantile[tiab] OR "Child"[Mesh] OR child[tiab] OR children[tiab] OR childhood[tiab] OR preadolescent[tiab] OR preadolescents[tiab] OR prepubescent[tiab] OR "Adolescent"[Mesh] OR adolescent[tiab] OR adolescents[tiab] OR youth[tiab] OR youths[tiab] OR teenager[tiab] OR teenagers[tiab] OR teenage[tiab] OR teen[tiab] OR teens[tiab]) NOT ("Adult"[Mesh] NOT ("Adolescent"[Mesh] OR "Child"[Mesh] OR "Infant"[Mesh])) | 3582430 |
| 2 | "postoperative period"[mesh] OR "Postoperative Care"[mesh] OR "postoperative complications"[mesh] OR postoperative[tiab] | 794426 |
| 3 | "Cardiac Surgical Procedures"[Mesh] OR "Cardiopulmonary Bypass"[Mesh] OR "cardiac surgery"[tiab] OR "cardiac surgeries"[tiab] OR "heart surgery"[tiab] OR "heart surgeries"[tiab] OR "cardiopulmonary bypass"[tiab] OR "cardiac surgical procedures"[tiab] OR "cardiac surgical procedure"[tiab] OR cardio surgery[tiab] | 229150 |
| 4 | (randomized controlled trial[pt] OR controlled clinical trial[pt] OR randomized[tiab] OR randomised[tiab] OR randomization[tiab] OR randomisation[tiab] OR placebo[tiab] OR drug therapy[sh] OR randomly[tiab] OR trial[tiab] OR groups[tiab] OR "Clinical trial"[pt] OR “clinical trial”[tiab] OR “clinical trials”[tiab] OR "evaluation studies"[Publication Type] OR "evaluation studies as topic"[MeSH Terms] OR "evaluation study"[tiab] OR "evaluation studies"[tiab] OR "intervention study"[tiab] OR "intervention studies"[tiab] OR "case-control studies"[MeSH Terms] OR "case-control"[tiab] OR "cohort studies"[MeSH Terms] OR cohort[tiab] OR "longitudinal studies"[MeSH Terms] OR longitudinal[tiab] OR longitudinally[tiab] OR prospective[tiab] OR prospectively[tiab] OR "retrospective studies"[MeSH Terms] OR retrospective[tiab] OR "follow up"[tiab] OR "comparative study"[Publication Type] OR "comparative study"[tiab] OR systematic[subset] OR "meta-analysis"[Publication Type] OR "meta-analysis as topic"[MeSH Terms] OR "meta-analysis"[tiab] OR "meta-analyses"[tiab]) NOT (Editorial[ptyp] OR Letter[ptyp] OR Case Reports[ptyp] OR Comment[ptyp]) NOT (animals[mh] NOT humans[mh]) | 6228370 |
| 5 | #1 AND #2 AND #3 AND #4  | 7277 |
| 6 | #5 AND English[lang] AND ("2000"[Date - Entrez] : "2019"[Date - Entrez]) | 4839 |
| 7 | #6 AND (diuretics[mesh] OR diuretics [Pharmacological Action] OR diuretic[tiab] OR diuretics[tiab]) | 73 |
| 8 | #6 AND (anticoagulants[mesh] OR Anticoagulants [Pharmacological Action] OR anticoagul\*[tiab] OR "thrombin inhibitors"[tiab] OR "thrombin inhibitor"[tiab] OR antithrombotic\*[tiab]) | 245 |
| 9 | #6 AND ("Immunosuppressive Agents"[mesh] OR immunosuppression[mesh] OR "Immunosuppressive Agents"[Pharmacological Action] OR immuno-suppressive[tiab] OR immunosuppressants[tiab] OR immunosuppressant[tiab] OR immunosuppression[tiab] OR immunosuppressions[tiab] OR "immune suppressant"[tiab] OR "immune suppressants"[tiab] OR immunodepressant[tiab] OR immunodepressants[tiab] OR immunosuppressor[tiab] OR immunosuppressors[tiab]) | 137 |
| 10 | #6 AND (steroids[mesh] OR steroid\*[tiab]) | 149 |
| 11 | #6 AND (analgesics[mesh] OR analgesics[Pharmacological Action] OR analgesic[tiab] OR analgesics[tiab]) | 207 |
| 12 | #6 AND (anesthetics[mesh] OR "Anesthetics"[Pharmacological Action] OR anesthetic[tiab] OR anesthetics[tiab] OR anaesthetic[tiab] OR anaesthetics[tiab]) | 184 |
| 13 | #6 AND ("Vasodilator Agents"[Mesh] OR "Vasodilator Agents"[Pharmacological Action] OR vasodilator[tiab] OR vasodilators[tiab] OR vasorelaxants[tiab] OR vasorelaxant[tiab] OR "vasoactive antagonists"[tiab] OR "vasoactive antagonist"[tiab] OR Vasodilatant[tiab] OR vasodilating[tiab] OR vasodilative[tiab]) | 186 |
| 14 | #6 AND ("Cardiotonic Agents"[Mesh] OR "Cardiotonic Agents"[Pharmacological Action] OR cardiotonic[tiab] OR inotrope\*[tiab] OR "cardiac stimulants"[tiab] OR "cardiac stimulant"[tiab] OR cardiotonic\*[tiab] OR "myocardial stimulant\*"[tiab] OR "cardioprotective agent\*"[tiab] OR "heart stimulant" OR "heart stimulants"[tiab] OR “vasoconstrictor agents”[Mesh]) | 249 |
| 15 | #6 AND (("Hypoglycemic Agents"[mesh] OR insulin[mesh] OR "Hypoglycemic Agents"[Pharmacological Action] OR "hypoglycemic agent\*"[tiab] OR "hypoglycaemic agent\*"[tiab] OR "hypoglycaemic drug\*"[tiab] OR antihyperglycemic\*[tiab] OR "hypoglycemic drug\*"[tiab] OR antidiabetic\*[tiab] OR insulin[tiab]) OR ("calcium"[MeSH Terms] OR "calcium"[All Fields]) OR ("thyroid gland"[MeSH Terms] OR ("thyroid"[All Fields] AND "gland"[All Fields]) OR "thyroid gland"[All Fields] OR "thyroid"[All Fields] OR "thyroid (usp)"[MeSH Terms] OR ("thyroid"[All Fields] AND "(usp)"[All Fields]) OR "thyroid (usp)"[All Fields])) | 128 |
| 16 | #6 AND ("anti-arrhythmia agents"[All Fields] OR "anti-arrhythmia agents"[MeSH Terms] OR antiarrhythmic drugs[Text Word]) | 51 |

|  |  |
| --- | --- |
| EMBASE | Results |
| 1 | ([infant]/lim OR [child]/lim OR [adolescent]/lim OR pediatric:ti,ab OR pediatrics:ti,ab OR paediatric:ti,ab OR paediatrics:ti,ab OR juvenile:ti,ab OR juveniles:ti,ab OR infant:ti,ab OR infants:ti,ab OR infantile:ti,ab OR child:ti,ab OR children:ti,ab OR childhood:ti,ab OR preadolescent:ti,ab OR preadolescents:ti,ab OR prepubescent:ti,ab OR adolescent:ti,ab OR adolescents:ti,ab OR youth:ti,ab OR youths:ti,ab OR teenager:ti,ab OR teenagers:ti,ab OR teenaged:ti,ab OR teen:ti,ab OR teens:ti,ab) NOT (([young adult]/lim OR [adult]/lim OR [middle aged]/lim OR [aged]/lim OR [very elderly]/lim) NOT ([embryo]/lim OR [fetus]/lim OR [newborn]/lim OR [infant]/lim OR [child]/lim OR [adolescent]/lim)) | 3522447 |
| 2 | 'postoperative period'/exp OR 'postoperative complication'/exp OR postoperative:ti,ab | 1224343 |
| 3 | 'heart surgery'/exp OR 'cardiopulmonary bypass'/exp OR 'cardiac surgery':ti,ab OR 'cardiac surgeries':ti,ab OR 'heart surgery':ti,ab OR 'heart surgeries':ti,ab OR 'cardiopulmonary bypass':ti,ab OR 'cardiac surgical procedures':ti,ab OR 'cardiac surgical procedure':ti,ab OR cardiosurgery:ti,ab OR cardiosurgeries:ti,ab | 365626 |
| 4 | ('randomized controlled trial'/exp OR 'crossover procedure'/exp OR 'double blind procedure'/exp OR 'single blind procedure'/exp OR random\*:ab,ti OR factorial\*:ab,ti OR crossover\*:ab,ti OR (cross NEAR/1 over\*):ab,ti OR placebo\*:ab,ti OR (doubl\* NEAR/1 blind\*):ab,ti OR (singl\* NEAR/1 blind\*):ab,ti OR assign\*:ab,ti OR allocat\*:ab,ti OR volunteer\*:ab,ti OR 'clinical study'/exp OR ‘clinical trial’:ti,ab OR ‘clinical trials’:ti,ab OR 'controlled study'/exp OR 'evaluation'/exp OR ‘evaluation study’:ab,ti OR ‘evaluation studies’:ab,ti OR ‘intervention study’:ab,ti OR ‘intervention studies’:ab,ti OR ‘case control’:ab,ti OR 'cohort analysis'/exp OR cohort:ab,ti OR longitudinal\*:ab,ti OR prospective:ab,ti OR prospectively:ab,ti OR retrospective:ab,ti OR 'follow up'/exp OR ‘follow up’:ab,ti OR 'comparative effectiveness'/exp OR 'comparative study'/exp OR ‘comparative study’:ab,ti OR ‘comparative studies’:ab,ti OR 'evidence based medicine'/exp OR ‘systematic review’:ab,ti OR ‘meta-analysis’:ab,ti OR ‘meta-analyses’:ab,ti) NOT ('case report'/exp OR 'case study'/exp OR 'editorial'/exp OR 'letter'/exp OR 'note'/exp) | 11497663 |
| 5 | #1 AND #2 AND #3 AND #4 | 9609 |
| 6 | #5 AND [humans]/lim AND [english]/lim AND [1-1-2000]/sd | 6208 |
| 7 | #6 AND ([embase]/lim NOT [medline]/lim) | 1490 |
| 8 | #7 AND ('diuretic agent'/exp OR diuretic:ti,ab OR diuretics:ti,ab) | 37 |
| 9 | #7 AND ('anticoagulant agent'/exp OR anticoagul\*:ti,ab OR 'thrombin inhibitors':ti,ab OR 'thrombin inhibitor':ti,ab OR antithrombotic\*:ti,ab) | 138 |
| 10 | #7 AND ('immunosuppressive agent'/exp OR 'immunosuppressive treatment'/exp OR immuno-suppressive:ti,ab OR immunosuppressants:ti,ab OR immunosuppressant:ti,ab OR immunosuppression:ti,ab OR immunosuppressions:ti,ab OR 'immune suppressant':ti,ab OR 'immune suppressants':ti,ab OR immunodepressant:ti,ab OR immunodepressants:ti,ab OR immunosuppressor:ti,ab OR immunosuppressors:ti,ab) | 124 |
| 11 | #7 AND ('steroid'/exp OR steroid\*:ti,ab) | 118 |
| 12 | #7 AND ('analgesic agent'/exp OR analgesic:ti,ab OR analgesics:ti,ab) | 101 |
| 13 | #7 AND ('anesthetic agent'/exp OR anesthetic:ti,ab OR anesthetics:ti,ab OR anaesthetic:ti,ab OR anaesthetics:ti,ab) | 62 |
| 14 | #7 AND ('vasodilator agent'/exp OR vasodilator:ti,ab OR vasodilators:ti,ab OR vasorelaxants:ti,ab OR vasorelaxant:ti,ab OR 'vasoactive antagonists':ti,ab OR 'vasoactive antagonist':ti,ab OR vasodilatant:ti,ab OR vasodilating:ti,ab OR vasodilative:ti,ab) | 85 |
| 15 | #7 AND ('cardiotonic agent'/exp OR cardiotonic:ti,ab OR inotrope\*:ti,ab OR 'cardiac stimulants':ti,ab OR 'cardiac stimulant':ti,ab OR cardiotonic\*:ti,ab OR 'myocardial stimulant\*':ti,ab OR 'cardioprotective agent\*':ti,ab OR 'heart stimulant' OR 'heart stimulants':ti,ab) | 171 |
| 16 | #7 AND (('antidiabetic agent'/exp OR 'insulin'/exp OR 'hypoglycemic agent\*':ti,ab OR antihyperglycemic\*:ti,ab OR 'hypoglycemic drug\*':ti,ab OR 'hypoglycaemic agent\*':ti,ab OR 'hypoglycaemic drug\*':ti,ab OR antidiabetic\*:ti,ab OR antidiabetes:ti,ab OR insulin:ti,ab) OR (‘calcium’/exp OR ‘calcium’:ti,ab) OR (‘thyroid gland’/exp OR (‘thyroid’:ti,ab))) | 34 |
| 17 | #7 AND ('antiarrhythmic agent'/exp OR antiarrhythmic:ti,ab OR antiarrhythmics:ti,ab) | 45 |